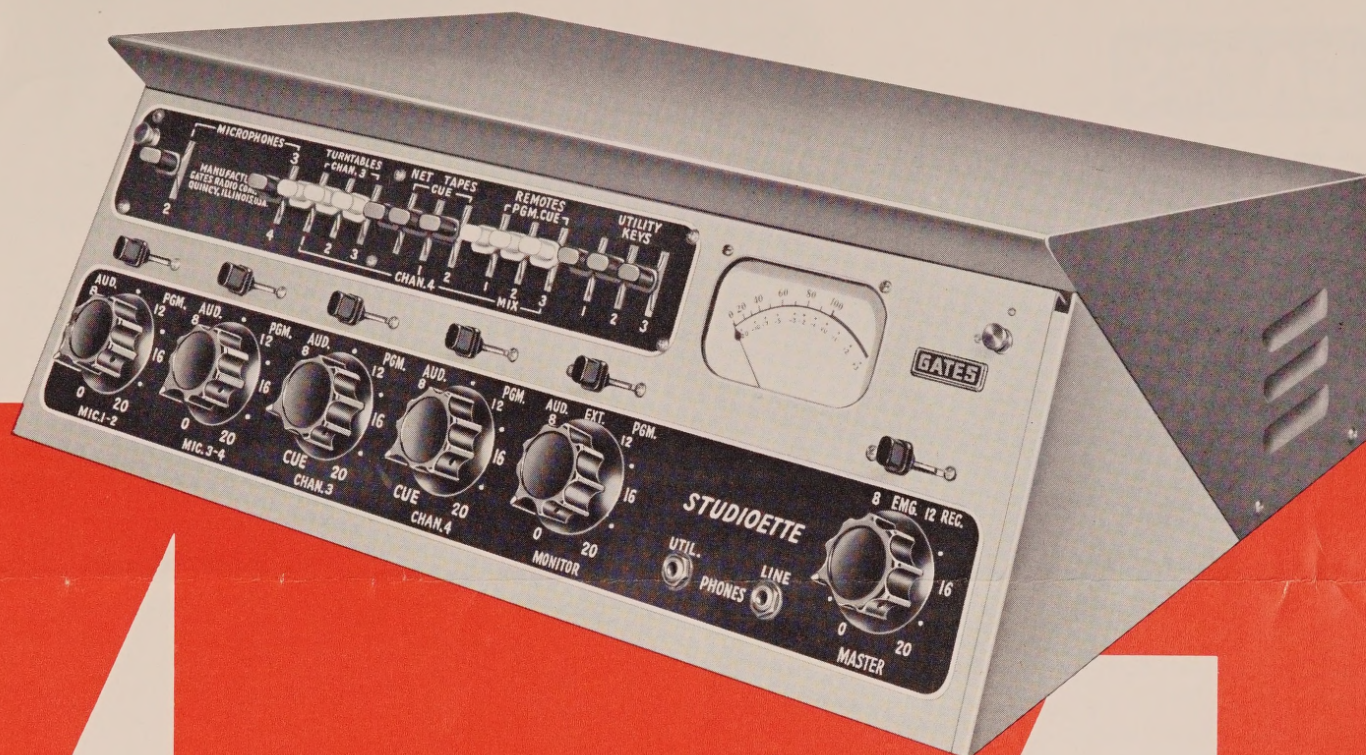




GATES

STUDIOETTE

4-CHANNEL AUDIO CONSOLE

GATES

STUDIOETTE

4 - CHANNEL
AUDIO CONSOLE

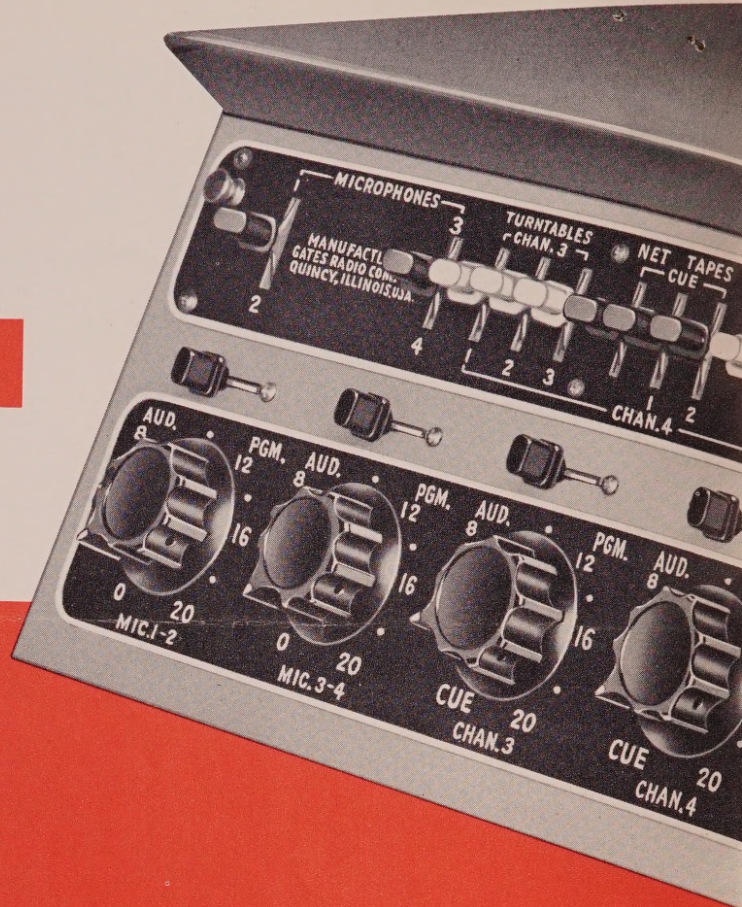
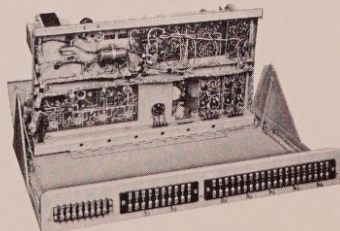
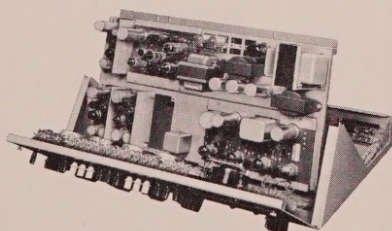
The Gates Studioette is a perfect blending of workhorse versatility and functional design for modern styling. Here, an unusual generosity of controls, new performance standards, service ease and smart commercial appearance are combined with quality engineering and materials to satisfy the most demanding broadcaster.

The Studioette condenses big console facilities into the ease of four mixing channels.

Four channel, step type mixer with generous key switching facilities accommodates four microphones into two preamplifiers, three turntables, two tapes or projectors, network and three remote lines. Three utility keys are provided for your individual needs. The Studioette also includes a high gain program amplifier, 10 watt ultra linear monitoring amplifier, dual muting and warning light relays, 4" illuminated VU meter, complete cueing facilities for turntables, net, tapes and remotes, and output emergency key.

Below, lid is completely removed. Front panel hinges out to reach every "behind the panel" component. Cleaning the step type controls or replacing the meter lamp can even be enjoyable. The amplifier deck hinges up so that muting relay contacts are at finger tip when touch-up burnishing is required. Tubes may be slipped out for checking in half the time with less chance of breakage.

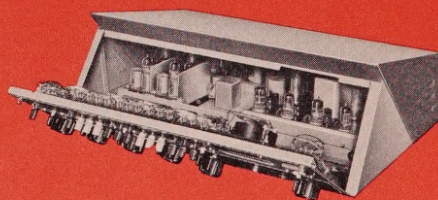
Below is the reverse view of the illustration on the left. Here the wonderful uniformity and reliability of printed wiring tells the obvious story of excellence. Each amplifier is always the same as each wire is always in the same errorless place with no possibility of insulation chafing or deterioration. In servicing, there is no maze of wires winding under and above components. The chance of rosin joints is essentially eliminated with the machine soldering technique in printed wiring.



SPECIFICATIONS

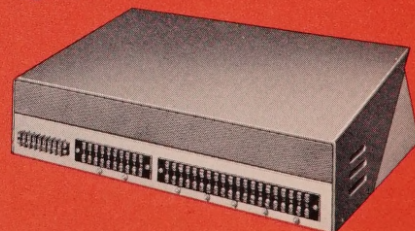
MIXING CHANNELS: There are four mixing channels. Each is key selected to either the program or audition bus. The audition bus also feeds an external pair of terminals for recording, etc. Each mixing channel is low impedance and has a step type control having 20 steps of 2 db. Channels 3 and 4 have cue position at infinity or off position of the mixer. The block diagram excellently illustrates the function of the mixer as related to circuit control.

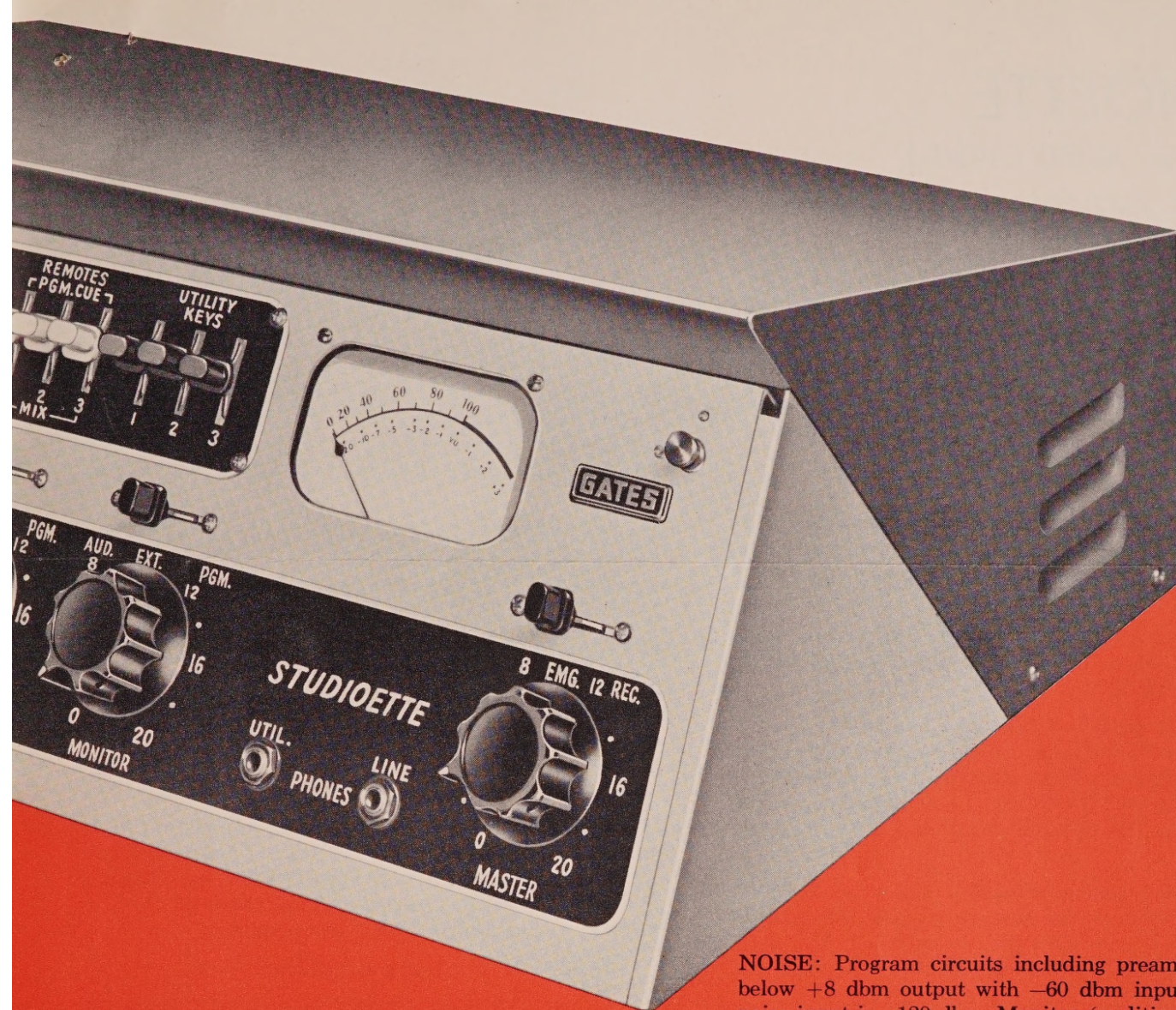
PREAMPLIFIERS: Two are supplied as standard equipment. Space is allowed for a third M5215 preamplifier which may be added, when needed, in a few minutes. As three unwired spare (utility) keys are part of the Studioette front panel complement, the third preamplifier may accommodate two more microphones and connected as one leg of the 3-input turntable channel. As space is also provided for two more muting relays, the extra preamplifier is compatible with the speaker muting requirement.



The front panel hinges to the cabinet base.

Studioette — Rear view.





IMPEDANCES:

Input to preamplifiers, 30/50 and 150/250 ohms.
 Turntable inputs, 150/250 ohms.
 Tape, network, remote line inputs, 500/600 ohms.
 Program line output, 500/600 ohms.
 Monitoring amplifier output, 8 and 16 ohms.*

*When monitoring amplifier is used as emergency program amplifier, a bridging pad converts to 500 ohms impedance. Also may be used with ZY2003 speaker matching transformer where 500 ohms to speakers is desired (see Index "Speaker Matching Transformers").

- GAIN:** (a) Any preamplifier input to program line output 103 db. ± 2 db.
 (b) Any preamplifier input to monitoring amplifier output 140 db. ± 3 db.
 (c) Any turntable, net, tape or remote line input to program line output 63 db. ± 2 db.
 (d) Any turntable, net, tape or remote line input to monitoring amplifier output 100 db. ± 3 db.

NOTE: Gain of monitoring amplifier is reduced by a fixed pad when operating from output of the program line.

RESPONSE: Program circuits $\pm 1\frac{1}{2}$ db. 30-15,000 cycles.
 Monitor (audition) circuits ± 2 db, 30-15,000 cycles.

OUTPUT LEVELS AND DISTORTION: Program line maximum of +8 dbm at 1% or less distortion. Monitoring amplifier maximum of +40 dbm (equivalent to 10 watts) at 1% or less distortion.

NOISE: Program circuits including preamplifier, 60 db below +8 dbm output with -60 dbm input. Equivalent noise input is -120 dbm. Monitor (audition) circuits, 55 db below +40 dbm output.

TUBES: Preamplifiers, each (2) 5879.

Program amplifier, (3) 5879, (1) 12AU7.

Monitor booster amplifier, (1) 12AX7.

Monitor amplifier, (2) 12AX7, (2) EL84.

Power supply, (2) OA2, (1) GZ-34.

TOTAL TUBES: 16.

TOTAL TUBE TYPES: 6.

RELAYS: Two are supplied as standard with space for two additional relays where needed. These relays operate in conjunction with microphone keys S1 and S2 and mixing keys S12 and S13 (see functional diagram). Any muting arrangement is possible. Relay contacts are supplied for operation of warning lights as well as loud-speaker muting.

SIZE: 24" wide, 8 $\frac{1}{4}$ " highest point, 17" deep.

WEIGHT: Net weight, 55 lbs. Packed weight, 70 lbs.

CUBAGE: 4.6 cubic feet.

POWER: 115 volts, 50/60 cycles.

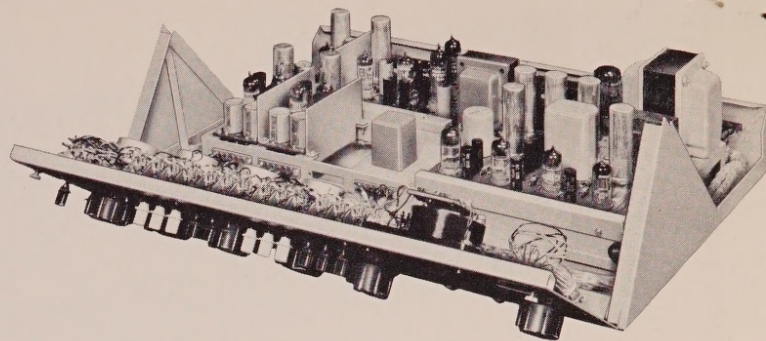
POWER CONSUMPTION: 120 watts.

TERMINATIONS: Numbered screw terminals.

FINISH: Cabinet in medium, hand rubbed, gloss gray. Panel in second tone of gray with escutcheons in anodized black and natural aluminum.

STUDIOETTE

4-CHANNEL AUDIO CONSOLE



ADDITIONAL FACILITIES include an output emergency key where the program line may be switched to the monitoring amplifier output in case of a noisy tube, etc., developing in the program amplifier during a broadcast. A monitor selector key switches the monitoring amplifier input to: (1) program line for monitoring, (2) external terminals for external input, and (3) audition bus of the mixing system. A headphone jack is across the program line at all times. — The 4" illuminated VU meter is flush mounted. The meter is connected to the program line and indicates +8 VU at 0 scale reading.

POWER SUPPLY is self-contained in the Studioette and supplies all voltages for filament and plate requirements. Extra capacity is available for the optional third preamplifier and optional muting relays.

MONITORING AMPLIFIER is ultra linear type and delivers a full 10 watts at 1% or less distortion. Also 100% printed wiring.

MONITOR BOOSTER: A two-stage printed wiring amplifier between the audition bus of the mixer and input to the monitoring amplifier. This feature provides balanced level between the program and audition bus so when switching the operator needs not readjust gain settings.

CUEING: When mixing channels 3 and 4 are at OFF position, they automatically connect to a pair of terminals to which a cueing amplifier may be attached. The new Gates M5377 desk mount cueing amplifier is ideal for

this service and is described in the Gates catalog (see Index, Cueing Amplifier). — With this feature, all circuits feeding mixing channels 3 and 4 may be prechecked, including turntables, network, tape inputs and remote lines.

TAPE INPUTS: Two keys select two tape recorder inputs to mixing channel 4 or cue override. Tape inputs may be utilized for projector inputs where the Studioette is employed in TV.

TURNTABLE INPUTS: Three keys accommodate three turntable inputs. These keys permit switching each of three turntables to either mixing channels 3 or 4.

REMOTE LINES: Three keys select three remote lines in three positions: (1) mixing channel 4 for broadcasting, (2) override, and (3) program cue to the remote line.

SPEAKER MATCHING TRANSFORMER: Where two or three speakers are used, a speaker matching transformer is normally not required. Where more speakers are used, the A30601 matching transformer, 48 ohms to 8 ohms, is available as an optional accessory.

NOTE: All gain measurements are ± 2 db.

ORDERING INFORMATION

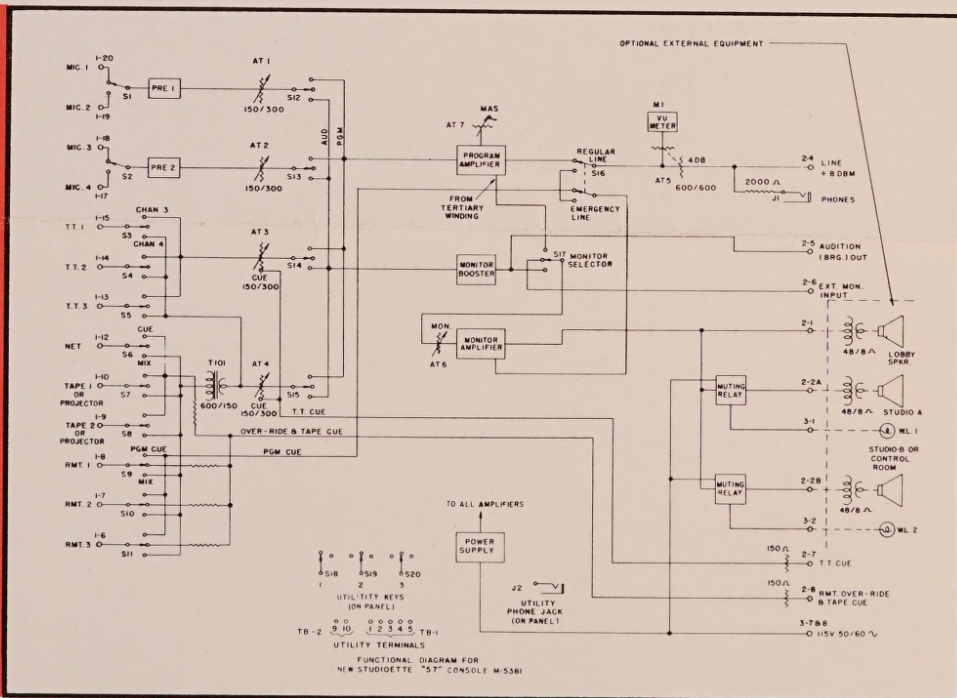
Studioette console complete with tubes, two preamplifiers and two muting relays, ready to use **M-5381**

Extra preamplifier for above **M-5304**

Extra muting relay for above **AK-12626**

Speaker matching transformer **A-30601**

Spare 100% tube kit for Studioette **TK-270**



GATES

GATES RADIO COMPANY

Subsidiary of Harris-Intertype Corporation

QUINCY, ILLINOIS

**HARRIS
INTERTYPE
CORPORATION**

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